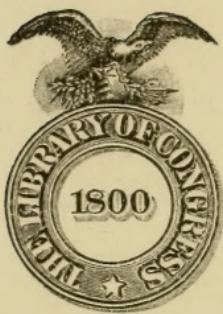


MINIATURE AND WINDOW GARDENING





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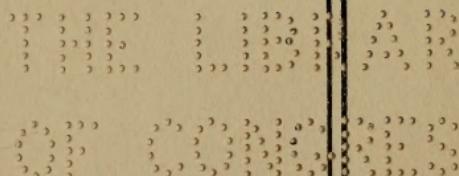
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Miniature
AND
Window Gardening

Miniature AND Window Gardening

BY
PHOEBE ALLEN AND DR. GODFREY



NEW YORK
JAMES POTT & COMPANY
1902

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Press of J. J. Little & Co.
Astor Place, New York

A decorative border consisting of a repeating pattern of the letter 'e'. The border is composed of two rows of 'e's. The top row has a larger 'e' at the top, followed by a smaller 'e' in the middle, and a larger 'e' at the bottom. The bottom row has a smaller 'e' at the top, followed by a larger 'e' in the middle, and a smaller 'e' at the bottom. The pattern repeats across the width of the border.

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INTRODUCTION

“GARDENS were before gardeners, and but Intro-
some hours after the earth,” says the quaint duction
old author of “*Medico Religio*,” and in-
deed, from all time, love of gardening, in
some form or another, has prevailed amongst
men.

“The suburban gardener is a latter-day
creation,” declares a writer of to-day; we
would like to remind him of many and sun-
dry Londoners of two centuries ago, who
were enthusiastic horticulturists in their
“close-by-town” residences. But whether
of ancient or modern creation, there is no
class of flower-growers with whom we feel
a greater sympathy than with those dwellers
in cities and suburbs, to whom a “plant of
my own growing,” a “shrub of my own
rearing,” mean a whole world of pride and
enjoyment.

“Sow labor and patience upon stones and roses will spring forth,” runs the Eastern proverb, and without undertaking to rival this performance quite literally, we do maintain that with industry and perseverance, not merely roses, but all manner of “faire flowres” may be produced.

And this, we hold, is possible, even in a miniature garden, where every inch of the soil, every brick of the walls, and every available window of the house must be pressed into the service of horticulture.

The suburban gardener’s greatest external foes are, no doubt, the fogs of winter, the dust and glare of summer, and destructive winds pretty nearly all the year round. As to his minor trials, in the shape of invading dogs and cats, possibly even fowls, all these, and many more, are probably so present to our reader’s mind, that we forbear to dwell further upon them.

But what may be called the “foes of his own household,” are generally the miniature gardener’s want of space, coupled frequently with want of knowledge. There is so much he would like to plant and sow, and so little

room to do it in, and he is so painfully aware of his ignorance as to how to make the most of that little, that it is with a view to helping this heavily-handicapped horticulturist, that we have attempted to compile this little book.

MINIATURE GARDENING

CHAPTER I

WHAT TO GROW

“ I HAVE a tiny slip of ground—a neighbor ‘ Toy unfeeling describes it as a ‘ toy garden ’— garden ’ with a small patch of grass and three very narrow borders. With this amount of ‘ pleasure ground ’ at my disposal, I am told that I could, with proper treatment, secure a good display of flowers. But I’m so ignorant, I don’t know the very A B C of gardening, and so ashamed of my ignorance that I don’t want to expose it by asking any foolish questions. Pity such a distressed ignoramus.”

The above confession reached us not so long ago, and (lamentable as such a plight

Over-crowding may seem to those who have always enjoyed the luxury of a garden as a matter of course; it is by no means such a very uncommon one amongst dwellers in cities and city borders.

And so it is with the needs of the "distressed ignoramus" very present to our minds that we begin this chapter.

In every undertaking, it is well to know clearly what object we wish to attain, and then set about discovering the best means of attaining that object.

Now the great ambition of the miniature gardener is, we take it, to make the utmost of the limited space at his command.

It is always a great temptation to the amateur to overcrowd his borders, for where room is so precious and so scarce, it seems a sin to allow space for even a caterpillar to walk between the plants.

But overcrowding is a grievous mistake.

Plants require light, air, and elbow-room as much as we do.

Another pitfall, into which the unlearned often stumbles, is in the selection of his plants. He generally soars too high.

Now the list of both perennials and annuals include so many lovely and fragrant biennials, blossoms, that to produce an abundance of gay flowers, there is no need to aspire to those plants which cannot be sown in the open ground, and which may require more than quite ordinary care and soil.

There are several ways of making a garden pretty. Besides the cultivation of bulbs—we shall speak of them later—there are what are termed “bedding-out plants.” These are Geraniums, Verbenas, Fuchsias, etc., but these are (comparatively speaking) expensive, and though we do not go so far as to place them altogether beyond the reach of our readers, we strongly advise them—at starting, at any rate—to give the preference to perennials, biennials, and annuals.

“But what do you mean by perennials and annuals?” we hear our “distressed ignoramus” ask.

By annuals, we mean those plants that last for one year only. They blossom, seed, and then die down.

Biennials are plants that last for two years, making leaves the first year, and flowers and

Hardy seed the second. Sweet Williams and Holly-hocks are biennials.

and half hardy Perennials last for many years in succession, but, like the biennials, do not flower the same year in which they are sown.

hardy Again, there are hardy annuals and half-hardy annuals, hardy perennials and half-hardy perennials.

In garden seed lists, you see the letters h.a. and h.h.a., placed against the two former, and h.p. and h.h.p. against the latter. And these indications are very valuable to the unlearned, because the seeds of hardy and half-hardy plants require, of course, different treatment. Now hardy annuals, such as Mignonette, Larkspur, Poppies, and Lupins, Marygolds, Cornflowers, Nasturtiums, and many others—to be mentioned later—may be sown fearlessly in the open ground in April and May.

(Some hardy annuals, indeed, as we shall show later, may be sown “overnight for the summer,” as a quaint old gardener used to say, by which he meant might be put in the ground in the late autumn for early spring blooming.)

To the half-hardy annuals belong Asters, Sowing Stocks, Balsams, Lobelias, Phlox, Linum—that pretty scarlet-flowered Flax—and many others.

The seeds of these, being only half hardy, must never be sown out of doors until the beginning of June, or at any rate, till all fear of frost is over.

Folks who are the lucky possessors of a tiny hot-bed may sow half-hardy annuals in pots and boxes as early as March, so as to have stout young seedlings for planting out in June.

Hardy perennials, such as Pansies, Cowslips, Double Daisies, Pinks, Polyanthus, Lavender, and others, may be sown in the ground any time from March to September, whilst the same rules for sowing the seeds of half-hardy annuals apply to those of half-hardy perennials.

Heliotropes, Petunias, Salvias, Verbenas, Begonias, are some of the latter.

Now there is no doubt that hardy perennials are by far the most satisfactory plants for little gardens.

In the first place—and this is an important

Grouping consideration with most miniature gardeners—the expense incurred in growing perennials is very small. When the seeds have once been bought (they can mostly be obtained for ten cents a packet), all expense attaching to their cultivation is hardly worth the mention.

Secondly, they are permanent.

Thirdly, owing to the natural grace of their growth, no class of plant lends itself so well to grouping, and there *is* scope for grouping even in the smallest slip of ground.

Fourthly, perennials are better than any other plants for supplying flowers for cutting.

It has been aptly said that "Hardy perennial gardening is equally open to the millionaire and the millionaire."

Still, we would by no means exclude annuals. If "variety is the spice of life," it certainly is needed to make the charm of even little gardens complete. Therefore, where most of the ground is devoted to permanent plants, a sprinkling of bright annuals, here and there, is a very welcome form of variety.

Where should we be without our gorgeous

Poppies, our flame-colored Nasturtiums, our Variety dainty Sweet Peas, our fragrant Mignonette, and a dozen other favorites ?

Only let these "annual fireworks" be used in a much smaller proportion to the perennials. And in laying out our little borders, it will be well to regard them in the light of those guests that tarry but a season, and to devote our best attention to the perennial residents.

Now here are the names of some perennials that are specially suitable for a town garden border.

Pansies, Double Daisies, Carnations, Polyanthus, Stocks, Phlox Drummondi, Asters, Canterbury Bells, Lily of the Valley, Japanese Anemones, Iris Germanica, Paeonies, Sweet William, Verbenas, Wallflowers, Snapdragon, Chrysanthemums.

As an actual border flower for a town garden, none is better than the old-fashioned Pink; whilst the Double Daisy, either red or white, beloved of cottagers, makes a charming edging to a border, and being perennial, when Daisies have once taken root, they are permanent.

Border plants The Thrift too, with its pretty heads of pink blossoms, makes a capital border plant for a town garden.

In almost every town garden the following annuals will do well and give little trouble:

Sunflowers, Nasturtiums, both tall and dwarf; Cornflowers, Marygold, Sweet Peas—if the border be sunny enough—Mignonette, Lupins, Nemophilas, etc., etc.

CHAPTER II

HOW TO GROW PERENNIALS AND ANNUALS

WITH a view of ensuring a bright spring garden, it is well to sow, either in September or early in October, those seeds which are sufficiently hardy to stand wintering in the open ground.

Before putting in your seeds, however, you must prepare your border. Set to work to dig it over rather deeply, breaking up all the clods. Pick up every stone and pull up every weed and *burn it*. Don't follow some folks' advice and dig the pulled-up weed into the soil. If you do, they will most surely pay you out by reappearing to blemish your flowers. Fork in a dressing of manure, either hot-bed manure or decayed leaf-mould, or, if you can get them, road sweepings. These latter are especially good for your purpose, as they contain sand and grit. Beware, how-

Over-manuring ever, of overdoing the manure. In many cases plants do better in poor rather than rich soil, and the result of over-manuring is seen in too profuse foliage and scanty blossoms.

In sowing your seeds *don't bury them.*

The largest seed should never be put in at a greater depth than one inch, whilst some of the smaller seeds should be merely dusted over. An excellent plan is to have a little soil previously prepared, and, after scattering your seeds on the surface of your border, to sift this soil over them.

For autumn sowing, here is a list of the seeds we should specially recommend for a town garden:

Mignonette, Larkspur, Nemophila, Venus' Looking-Glass, Cornflower, Esscholtzia, Candytuft, Erysimum—the well-known orange variety of Candytuft—Sweet William, and Virginia Stock.

This latter is especially valuable for town gardens, as no amount of smoke seems to affect its growth. Moreover, it can be sown at any time in the year, so as to ensure a succession of bloom, and its red-rose or white flowers are very effective.

All these plants must be so familiar, even Autumn to the "distressed ignoramus," that it is sowing needless to attempt any description of them.

(The seeds of all can be obtained at any seedsman's at the rate of ten cents a packet.)

In addition to the above-mentioned flowers, we recommend the following for autumn sowing, and these having less well-known names, we will give a few particulars with each, so that when sowing their seeds our readers may know what they may expect to be the result in each case:

Alyssum Compactum—height, 9 inches; flower, bright yellow.

Godetia—1 foot, white or crimson.

Collinsia Bicolor—1 foot, purple and white.

Viscaria—kind of Corncockle—9 inches, bright rose.

Whitlavia Grandiflora—1 foot, dark purple.

Xeranthemum—2 feet, hardy everlasting, purple and white.

Ditto—crimson cerise variety, very beautiful.

Scabious—18 inches, purple, scarlet, or white.

Aspect Calliopsis—2 feet, yellow, maroon, crimson.

of your borders Leptosiphon Densiflorous—1 foot, rosy purple.

L. Albus—pure white, the most profusely blooming annual.

Calendula Marigold—1 foot, yellow and orange, and pure white.

Clarkias—1 foot, white, rose, red.

Clarkias are specially suited for autumn sowing. If the seed is put in in September, it flowers quite early in May, and is one of those early growers which never fail to bloom freely. Make the second sowing for succession in April.

All the other hardy annuals and perennials may be sown, as we have said before, in the open ground, in April and May; the hardy perennials from March to September; the half-hardy annuals and perennials not till the end of May.

In sowing your seeds *consider the aspect of your borders.* For, whereas for some flowers a sunny position is almost a necessity, others will really only do well in a comparatively shady one.

For instance, Sweet Peas love the sun, so Sun and do Cornflowers, Annual Chrysanthemums, shade Scarlet Flax, Sweet Alyssum, Mignonette, and many others.

On the other hand, Foxgloves, Prince's Feather, Solomon's Seal, Oriental Poppies, Godelias, Marigolds, Love-lies-bleeding, Nasturtiums, and others, do far better if sown in the shadier part of a border.

We once saw a shady border with a north aspect very successfully treated. No condition could be much more unfavorable to flowers, so the owner of that unpromising border was justly proud of his achievements.

He started by planting ferns, just the hardiest sort, taken from a country hedge, together with the common blue Periwinkle and some Foxgloves, both of these wild recruits also from a shady wood. As these did well, he became bolder, and added London Pride, Solomon's Seal, Creeping Jenny, and Musk, until this border, which his friends had assured him was practically useless to cultivate, became quite one of the prettiest little strips in his very tiny garden.

CHAPTER III

ON THE SOWING AND GENERAL ARRANGEMENT OF BORDERS

Lines or masses Now there are two ways generally in use of sowing a border.

Seeds are either sown in lines or in masses.

Where space is sufficiently abundant to make the possible failure of one border of little account, the sowing of different colored flowers in rows, so as to produce a ribbon border, is a very pretty experiment, and may result in a very good effect. But we would never counsel the owner of tiny gardens to attempt it. The lines are so apt to be broken, owing to the failure of some particular seed, or to the ravages of slugs or other garden pests, that the risk of having a spoiled border for a whole season is too great in their case.

A single row of, say, Double Daisies, or Color Clove Pinks, or Thrift, at the edge of a border is well enough, and gives a character to the rest of the border, but let the remainder of the seed-sowing be done in masses.

Don't sow in little dabs. However narrow your border may be, don't let any plot measure less than six inches in diameter (where you can manage it, one foot is the best); and don't repeat the same plant at intervals along your border. If you do, you will probably destroy what is of great importance in grouping flowers, namely, color effect. Even in a miniature garden, good effects, as well as harmony in color, should be aimed at.

For, just as a room, no matter what its size, may be pretty, or the reverse, by the choice and disposal of its furniture, so the whole beauty of a border may be made or marred by the arrangement of its flowers. Given two people with the same seeds and the same ground at their disposal, one may sow the border so as to make it a perfect little picture, whilst the other may compass such violent contrasts in color that the

Harmony result is either absolutely vulgar or gratingly rather hard.

than contrasts Again, others, with the object of avoiding formality, will sow the seeds more or less at haphazard, with the natural result that the border looks, at best, a meaningless jumble.

“Monster effects in grouping,” and “splendid harmonies in color,” as the landscape gardeners have it, are, of course, quite out of the question for any ordinary small garden; still, there are certain elementary rules in this direction to which even a “distressed ignoramus” would do well to adhere at starting.

(Very soon, we feel sure, the knowledge gained by his own experience would be enough to guide him on that point.)

First of all—though tastes may differ on this point—we would advise our readers to aim at securing harmony in their color arrangements rather than contrasts.

All warm colors, such as the different shades of red, crimson, scarlet, rose, pink, etc., are easy to deal with, such as we find in the Phloxes, which include scarlet, crimson, rose, and salmon tints; and Sweet Wil-

liams, Balsams, Poppies, Carnations, Pens- Blending
teums, and many others. These all har- colors
monize. So are the varying hues of yellow,
primrose, sulphur, orange, and creamy-
whites. The yellow and orange Daylily;
the sulphur and golden Violas; the orange
and yellow Nasturtiums, Marigolds (both the
lemon-colored and the red-gold), the deep
yellow and lemon-colored Polyanthus and
Auriculas will all group well together.

All these will blend and mix well. But blue, purple, or lilac tints are best grouped together, or if brought into the neighborhood of scarlets or pinks, it is well to interpose patches of sulphur or silvery white—the Achillea is excellent for this purpose; so is the Dwarf Double Bronze Wallflower, or the old-fashioned cream-colored Stock—or a rich bronze between them and the warmer coloring.

As regards the treatment of blue flowers, the greatest care is needed. The soft azure tint of the Nemophila, and some of the varieties of the Forget-me-not, as well as the rich purple blue of the Salvia, may be more fearlessly dealt with; but it is extraordinary

Whites in what absolutely hideous effects may be produced by the use, for instance, of the full blue of the Lobelia.

Who cannot recall to his mind's eye some border where a mass of glaring scarlet Geranium, edged with full blue Lobelia, has made our eyes positively ache with its crude hardness?

The combination of violet tints with blue, however beautiful the flowers may be *in themselves* and *by themselves*, may thus produce quite distressing effects.

Whereas, mix blue, sky blue, turquoise, full blue, hyacinth blue, with pale yellows, rosy whites, and even faintest pinks, and the result is lovely. To give blue, as artists say, its full value, let it stand by itself with only a setting of rich foliage.

Dead whites, too, such as the Candytuft and Stocks, require management. One or two, at the most, patches of white are quite enough for a small border.

We would advise a beginner to settle in his own mind exactly what perennials he means to have in each border, and having made his choice with due regard to the re-

spective seasons for flowering, to proceed Permanent next to the consideration of his annuals that residents he means to intersperse amongst them. Let him regard the perennials as his permanent residents, and group the annuals around and about them.

CHAPTER IV

BULBS

Soil

IT has been truly said that bulbs are the citizens' friends.

They will do equally well in the smokiest town garden as in any country one, and almost any soil will suit them.

Winter Aconites, Crocuses, Snowdrops, Hyacinths, Daffodils, Anemones, Ranunculus, Narcissus, Tulips, and Scillas will all flourish, provided they be properly planted, and at the right time.

October and November are on the whole the best months for putting bulbs in the ground.

(Daffodils may be put in in September.)

Prepare your border as advised in Chapter II., but in digging in the manure be careful not to allow any particle of it to come actually in contact with the bulbs.

As regards the *planting* of the bulbs, we Planting reverse the advice that we gave concerning bulbs perennials, for we recommend planting them in rows. In fair-sized beds and wide borders, beautiful color effects can be obtained by forming masses of Crocuses, purple, white, and golden, or by grouping other bulbs together in handsome plots; but the owners of narrow borders do better, in our opinion, to content themselves with the row system. For tiny beds, also, a better display can be made by planting the bulbs in rings or geometrical patterns than by clumping them.

Three great essentials to their future success must be kept in mind when bulbs are to be planted.

First, put them in the ground early. Bulbs planted too late in the season are very liable to rot in the ground.

Secondly, they must be planted closely together.

Thirdly, the soil below them should be as light as that above them.

Bulbs placed on too firm a basis will frequently fail to strike root. Each one will like to arrange his bulbs to his own taste, so

Protection we will only give a few directions as to the from frost actual planting of the different kinds.

Hyacinths and Tulips should be planted from four to six inches apart, according to size of bulb, and the crown should be put in the soil from two to four inches below the surface.

Daffodils, Narcissus, and Jonquils should be planted four inches deep, and the same distance apart.

Crocus, Scillas, and Snowdrops should be put in two inches deep, and Winter Aconites should be planted one inch deep and one-and-a-half apart.

Plant Anemones and Ranunculus two inches deep and three inches apart.

Litter to the depth of two or three inches should be strewn over the surface of the border, after the bulbs have been put in, to serve as a protection from the frost, but should be removed in spring, as soon as the first leaves have pushed their way through the soil. It must be replaced again at night during frosty weather.

As regards aspect, it must be borne in mind that whilst Snowdrops, Hyacinths,

and Aconites do equally well in sun or shade, Summer Crocus and Tulips must have plenty of sun, display and Daffodils and Narcissus do better on the whole in the shade.

Besides these bulbs, which are so indispensable for spring flowering, there are others, which, when space will allow, may be grown for summer display.

There are very few town gardens where Lilies will not grow, while the lovely purple German Iris—though, strictly speaking, this is not a bulb—seems positively to thrive and flourish in the smokiest parts of smoky cities. Nor does even a miniature garden seem quite complete without at least one clump of Dahlias.

As, however, Dahlias raised from seed require to be sown in a hotbed, our readers will have to beg or buy their plants. A great variety of these may be had at fairly moderate prices—fifteen cents a bulb or \$1.50 a dozen is, perhaps, the lowest sum.

Any garden soil will suit Dahlias, but in buying them for spring planting out of doors, be sure to ask for “green plants.” What are known in the Dahlia trade as “dry

Lilies

roots" are those which must be grown on heat. May and June are good times for putting in Dahlias to ensure autumn flowering. Place them from three to five feet apart, and, if possible, put a spadeful of manure under each bulb, remembering, however, our caution not to allow it to come in direct contact with the bulb. Water them well, and as soon as each plant puts out its leading green shoot, tie it to a stake. In November, lift the bulbs out of the soil, cut off all the shoots, and store out of reach of the frost. Don't choose either too damp or too dry a place for storing, as the bulbs must neither be allowed to shrivel or grow mouldy.

The German Iris is so easy of culture and must be so familiar to every town dweller, that beyond advising our readers to plant the bulbs in November, and to remember that Irises do best in sunny spots, it is needless to say more.

We now come to speak of Lilies.

For stateliness of habit, beauty of form, and variety of coloring, they are without rival among bulbous plants. Many of the species are delightfully fragrant.

Considering to what perfection the hardier Culture kind of Lilies may be brought, even in a tiny back city garden, how, with common care, they will grow and flourish in ordinary soil, and considering, too, what a variety may be found nowadays amongst the robust kind of Lilies, it is really marvellous that their culture is, comparatively speaking, so neglected.

Prepare the soil as already advised for the bulbs, and put them in the ground in the autumn, from September to November is the best time. Be careful to choose dry weather, both for preparing the soil and for planting the Lilies. If possible avoid giving Lilies a *full* southern aspect, as they do better if protected from the full mid-day sun. Though they may really be called hardy, it is well to protect them against frost in winter by a covering of ashes or litter. They all prefer a partial shade, and the taller sorts must have protection from high winds.

Put the large bulbs in at a depth of six to eight inches, the smaller ones from four to two, according to size. The distance to be

Slugs and left between the bulbs would also vary from other pests six to twelve inches.

As a rule medium-sized bulbs, neither too large nor too small, are best for planting.

Slugs are mortal enemies to the young green shoots, and will devour them mercilessly as soon as they appear above ground. At the first sign of these marauders, dust the soil with soot, or put a ring of unslaked lime round the bulbs. It is also wise to stir, not dig, the ground between the bulbs continually, in order to disturb the haunts of these garden pests.

Here are the names of some Lilies, which we consider the best for town gardens, and which are most likely to prove successful in the hands of a beginner in town or country:

The Scarlet Martagon Lily.

The Davuricum—purple, orange, or crimson.

The Auratum—white, spotted with maroon; fragrant.

The Panther Lily—scarlet and rich yellow, spotted with brown and purple.

The Canadense—bright yellow, spotted red.

Longiflorum—large, pure white, trumpet-shaped flowers. What to choose

Trigrinum Splendens—scarlet, with black spots.

Harrisii (Bermuda Easter Lily).

The Candidum—the tall white Lily.

One last hint to the unlearned in the matter of choosing bulbs.

Never take dried-up, shriveled, crinkled-looking bulbs; choose only those that are quite firm and plump to the touch.

CHAPTER V

ROCKERIES, ARCHES, SCREENS, ETC.

The shaded corner

EVEN in a miniature garden there is sometimes a spare spot for a little rockery. It may be only an ugly shaded corner in a back yard, or there may be an odd angle in some sunny border, where with a little management a small colony of rock-loving plants may be established.

We are, of course, aware that often in the hands of the unlearned, attempts at rockeries prove dismal failures. This is probably because they have not set about making them properly. Some people fancy that to establish a rockery all that is needed is to collect together a confused heap of rubbish, broken pots and pans, smashed crockery—the more disorderly the *débris* the better—and then sprinkle this unsightly jumble with a little soil.

But here the old, commonplace axiom Ferns that there's a right way and a wrong one for doing everything, holds good. The above method is certainly the wrong one.

The following plan is what we should venture to advise as being the right one, or at any rate the one that, so far as our experience goes, may lay claim to giving satisfactory results :

If you have only a shady corner at your command, make up your minds to grow only ferns. These will repay you best, not only by always looking green, but they also make a very pretty finish to cut flowers, and thus supply a constant want in a small garden, where suitable foliage for nosegays is generally scarce. (Stonecrop, Primroses, Snow-in-Summer may sometimes succeed tender ferns.)

However damp and dark a back yard may be, ferns will flourish, but they will also thrive well in the driest and lightest situation.

To make a rockery, start by forming a mound of soil, the size that your space may allow. Bank the earth up well together, so

How to
make the
rockery

as to make it as firm as possible. Then, and not before, put in your rockery work. As a rule avoid using any burrs, clinkers, fragments of old crockery, or vitrified materials of any sort. Use just a few broken stones, and be careful in arranging those that are to appear on the surface, not to allow any vacuum to exist between the soil and the stones. Let them be firmly fixed in the soil. Also beware of allowing any cracks in your surface. Fill these in with earth as soon as you observe them. When you have embedded all your stones, cover them lightly with a little soil. Then set about putting in your ferns. March is a good time for planting hardy ferns, and we strongly advise our readers to content themselves with the common but very pretty wild sorts, which are easily obtainable. If you have country friends, ask them to send you plants of Hart's Tongue, Lady Fern, Male Fern, Shield Fern, and Buckler Fern.

You should also have a Boston Fern, one of the most useful and ornamental of the "Sword Ferns." It is excellent for planting in shady borders, and is also a fine plant

for hanging pots or baskets on the piazza in summer and window in winter. specially

To make a fern rockery in a sunny spot, after constructing it on the plan already suggested, sow Rock-roses, Rock-cress, Stone-crop. The Yellow Stonecrop is a hardy perennial defying all city smoke and dust, the Sedum *Fabaria*, bearing its blossoms in rose-colored heads, the old-fashioned House-leek, the Wallflower—the yellow and blood-colored make a pretty contrast—the Cowslip, Sweet Alyssum, and the Alyssum *Compactum*, Golddust, beautiful yellow, the Aubretia, blue rosy lilac and deep purple, are all specially suitable for rockwork. All the Candytufts, crimson, scarlet, and orange, are suitable, besides Hepaticas, and the dear old-fashioned trailing Periwinkle, blue and white, Creeping Jenny, etc. Nor should the London Pride be forgotten; its feathery plume of blossom will thrive everywhere, and is always pretty to see.

Always be careful in watering rockeries to do so gently; otherwise, the soil gets washed off the upper stones.

Another form of garden ornament which

Use of
the wire
arch

may beautify an ugly little spot is the trunk of an old tree, sunk in the ground, and filled in with soil. A few hardy geraniums planted in this look very effective, while Sweet Peas, Convolvulus, and Nasturtiums will climb and creep over it grandly.

Another pretty feature may be introduced into the most limited space, and that is a wire arch. In using galvanized wire it is better to give it a coating of paint, for it is injurious for the young shoots of creepers to come in contact with the galvanized wire unless painted.

It is wonderful how really beautiful these arches may be made, by sowing a mere handful of seeds of some hardy creeper on each side of it. On the principle of having two strings to one's bow, it is always better to put in at the least two different creepers, on each side of the arch, so that if one fails to grow satisfactorily, the other may be literally "on the spot" to hide the deficiencies.

The common Hop takes very kindly to wire; so do the Canary creeper, Nasturtium, Convolvulus, and some of the hardier Clematis. The Jackmani, with its graceful foli-

age and rich purple blossoms, makes a very Privacy lovely drapery for arch or arbor. Planted in the at one end of an arch, with a Madame Ber- garden ard rose planted at the other, the Jackmani is very effective.

If the arch is to be an evergreen one, nothing is really prettier or more likely to prove a success in the long run than Ivy or Euonymus.

Next to securing a good display of flowers comes the wish to secure as much privacy in our gardens as possible. To enjoy the feeling that we cannot be overlooked each time we step out into our little pleasure ground is a great desideratum.

As a rule the judicious use of wire netting covered with hardy creepers will achieve this.

Here, again, if an evergreen screen is desired, nothing beats ivy. It will grow in any soil and adapt itself equally well to a damp or dry situation. The best adapted for screen purposes is the Irish Ivy. It is a self-climber and requires very little attention.

The Giant Ivy is also good.

The propagation of common Ivy is a sim-

ple process, and for those wishing to practise it we give a few plain directions elsewhere. But if the screen to be covered is a fairly large one, the most satisfactory way, certainly the quickest, of starting it, is to buy a stout young plant and set it in the ground at the foot of the screen.

Provided the weather be fairly favorable, any time in the early spring will do for planting ivy. It pays well for manure, and if watered plentifully in dry weather will make prodigious growth.

In trimming ivy, April is the best time; cut the straggling shoots off close to the main stem, where it is attached to the wall, or screen. For the making of merely summer screens the same creepers that we advised for arches are suitable. Sweet Peas, if the situation be sunny, may be reckoned on for producing a lovely effect; the Common Clematis—"Old Man's Beard"—also answers splendidly. You may purchase strong plants of this at any nursery for 25 cents a piece, but if you have a country friend who will send you some good rooted plants from a hedge, so much the better.

The Canary creeper makes an excellent Creepers screen plant. Though it does prefer the for screen sun, it will also thrive in the shade. April is a good time for sowing the seed. Any ordinary soil will suit it, and you may always depend upon it for being a very rapid grower. In good soil it will sometimes reach a height of fifteen feet. In its earliest stages of growth it requires a little care in the way of tying and training the young shoots. If these are neglected, their very luxuriance will stifle their development, for they will run into tangled masses, with the result that you will see bunches of foliage in some places and a length of bare stems in others.

If you have to suit a north aspect, sow the *Tropoelum Speciosum*, the fire-colored variety of the *Canariensis*—this does admirably if given plenty of water.

The *Convolvulus Major* is also good as a screen plant, and often grows ten or twelve feet high.

Our concluding suggestion for a good screen creeper for a town garden will sound, no doubt, very homely; namely, the common Scarlet Runner bean. And yet there is

Small cost nothing, perhaps, which is grown so extensively, because so successfully.

And no wonder!

For not only does its fresh green foliage, its brilliant blossoms, and its peculiarly effective habit of growth make the Scarlet Runner most ornamental, but it can also be made very useful.

Give the Scarlet Runner only a little good soil and a position where it can enjoy a little sunshine during some part of the day, and it will yield a plentiful supply of beans as well as blossoms in the most unfavorable surroundings.

NOTE.—The seeds of all the creepers we have mentioned in this chapter are very cheap. Most of them can be bought for five cents a packet, and a packet is an ample allowance for one season's sowing.

CHAPTER VI

ROSES, CREEPERS, ETC.

NO one would consider even a "toy-garden" worthy of its name if it did not hold to select at least some roses.

Roses, of one kind or another, if rightly selected, will lend themselves to most situations and treatment. The great point is to know what sort to select, especially for a town garden and a beginner's cultivation.

For though there are many beautiful varieties that will do well in or near a town, there are also many that will *not*.

Here are the names of some that are known to thrive in town gardens. They are all hybrid perpetuals, which do well planted in the open ground, and need no protection in the winter. They also possess the great advantage of blooming freely from June to November:

When and how to plant Jules Margotin, a bright cherry red; Marie Baumann, a light crimson; Prince Camille de Rohan, a deep crimson; Magna Charta, a bright pink; Madame Lang, pure white; Marquis de Castellani, an exquisite rose, pure pink, very large; Mdlle. Vercier, a carmine; General Jacqueminot, a rich crimson, of fine shape and exquisite fragrance; Madame Plantier, a pure white; Augustine Guinoisseau, a unique shade of flesh white; John Hopper, a bright rose with carmine centre.

Any of these may be had for about fifteen cents apiece as *dwarf* standards, which we should advise for growing in a little garden.

Standards and half standards are more expensive.

Roses should be put in the ground from October to March, the earlier in the autumn the better.

Dig the ground to the depth of eighteen inches, and fork in manure with the same precautions as already advised with respect to bulbs.

Moss Roses generally do well in town gardens. Three lovely varieties are Blanche

Moreau, a pure white; Marie de Blois, bright Climbing rose; and Luxembourg, a dark crimson. roses They flower during May, June, and July, and are very fragrant. They like close pruning and are the better for plenty of manure. They cost about 15 cents each.

For climbing roses to cover walls, the various Tea Roses are undoubtedly the best. They require no protection during the winter, and are really the true perpetuums amongst roses.

Here are some of those we recommend for a town or suburban garden:

Gloire de Dijon, too well known to need description; Madame Berard, clear pink; Belle Lyonnaise, lemon; Cheshunt, cherry, carmine, a grand autumn climber.

To cover an east porch or wall, Madame Berard is excellent. The Gloire de Dijon does well on a north wall.

Amongst other climbing roses, not Tea Roses, we should recommend Lord Penzance's Briar, perfectly hardy, with very fragrant foliage and brilliant fruit, which makes it very lovely in autumn; it does well on a N.E. wall.

Pruning

For a S.E. wall, nothing could be better than the Crimson Rambler, the Amadis, a deep purple crimson; or the Ayrshire Rose, either white or pink.

Cheshunt answers well on the east wall, whilst for a west wall, Noisette Roses, either pale pink or deep crimson, are good.

February and March are good months for pruning roses; the weaker shoots should be cut back rather closely, and the stronger ones left longer.

In very dry weather roses should be watered.

As regards other creepers, very much can be done in the way of beautifying the walls of a town house or garden by sowing a few suitable seeds. A mere handful of the *Canariensis* seed sown yearly at the foot of a wall, some tall growing Nasturtiums as well, will do admirably together, and make a most pleasing effect.

Virginian Creeper will grow where everything else fails. No amount of impurity in the atmosphere seems to hurt it or affect the permanence or abundance of its growth. It does well on the same wall as a Clematis, or

climbing rose, but care must be taken that Varieties it is not allowed to smother either. suitable

Besides the Virginian Creeper, the *Ampelopsis* Hedera and most ivies may be fearlessly planted against a north wall, and being self-clinging climbers, are to be specially recommended. *Pyrocanthus* and *Coton-easter* *Microphylla* are also suitable for a north wall, both being evergreen and bearing red berries in winter. They should be put in in February.

For a N.W. wall, *Ampelopsis Veitchi* and Rægner's Ivy are good.

Clematis, *Jackmani*, and *C. Montana* do well on a south wall; whilst for a S.E. wall *Jasmine Nudiflorum* is a most charming climber for winter, as it flowers freely, and is a very rapid grower.

For a shady aspect, the *Crataegus Lae-landi*, bearing red berries in winter, is very effective.

For a whitewashed wall, either variegated ivy or the *Escallonia Macrantha*, with its pink wax blossoms and glossy foliage, are excellent.

The American Allspice, with its fragrant

Training, deep maroon flowers, will sometimes do well tying, and on a north wall.

thinning climbers For porches, nothing equals the graceful drapery and rich coloring of the Clematis Jackmani. A passion-flower—the *P. Caerulea*—will sometimes do on a south wall or porch, but it needs a warm atmosphere.

The Common Honeysuckle, flowering from spring to autumn, and the sweet White Jessamine are too well known to need description. (One drawback to the former is its fatal liability to green-fly. In Germany it is called the “green-fly’s sanctuary.”) Both these, as well as “Old Man’s Beard,” do well in an exposed position.

The shoots of Clematis and other climbers need much attention in June, in the way of thinning and tying, so as to prevent them from growing in tangles. June is also the right time for nailing Clematis and Honeysuckle.

Again in September they should be carefully trained.

One last bit of advice. If you are planting climbers in a shady position, choose only those which are good for foliage, and leave the flowering ones alone.

CHAPTER VII

HEDGES, PATHS, GRASSPLOTS

ALTHOUGH a very few remarks on each of these subjects will suffice for our present purpose, yet we feel that our volume on miniature gardening would be incomplete without some allusion to them.

To begin with hedges.

Every garden must be bounded either by wall or fencing of some kind, either of which can be improved, sometimes even superseded, by a good evergreen hedge.

In small town gardens, nothing answers so well as Evergreen Privet. It is very hardy, will lend itself to any soil or situation, and is a very rapid grower. Moreover—and this is a great point where space is limited—its growth can be easily restrained by clipping. The young plants of Ever-

Evergreen green Privet can be put in the ground at any hedge time between September and April. Plant them about a foot away from the wall or railing, and leave six inches between each.

Don't prune them for the first year, and don't over-manure them. If, in your zeal to hasten their growth, you neglect the latter caution, your young plants will sicken and die. The best time for clipping Privet, after the first year's growth, is April and May.

Young plants of Evergreen Privet cost about 50 cents a dozen.

If you want to secure a high evergreen hedge in the shortest possible time, plant *Thuia Lobbi*.

Not only is its foliage extremely pleasing, being a rich green in summer and showing beautiful bronze tints in autumn and winter, but it is a very rapid grower, and will stand any amount of pruning to suit the size of either a broad or narrow border.

Get some good young plants, about three feet high, and after preparing your ground with a little manure, put them in eighteen inches apart. They frequently make a

growth of three feet in one year, and their Paths increase in denseness is equally satisfactory. February and March are good months for planting *Thuia Lobbi*.

Plants of about three feet high cost about \$1.00 the dozen.

The *Euonymus Jap.* forms a capital hedge near the railings of a town garden, but it is a very slow grower, though most satisfactory when grown.

Whilst we are on the subject of shrubs, Persian Lilac, the Ribes, the White and Yellow Broom, the Weigelias, and the hardy Ghent Azaleas are all suitable flowering shrubs for little gardens in or near towns. They are very ornamental, are easy of culture, and not costly to buy in the first instance. Good-sized plants of each may be had for about 25 cents apiece.

We now come to paths.

When a gravel walk is once made, it is easily kept in order. But to keep it in order is very necessary.

No matter if the path be on such a small scale that it only shows like a tiny thread, yet the single gravel walk in a miniature

garden is a very important feature. If it is ill-kept, sloppy, or weedy, it is enough to spoil the effect of your garden.

The old axiom that the first trouble is always the least, applies to the treatment of weeds on gravel. Pull up every weed you see.

Never leave a weed long enough to flower in your pathway. If you do, seed is formed as a natural consequence, and in the place of the one weed of to-day, you will shortly have a whole colony.

Many gardeners confidently recommend the use of patent weed killers, to be easily obtained at any druggist's.

But in the hands of the amateur they may do more harm than good, if they are not very carefully applied; if, for instance, they are suffered to come in contact with flower borders or turf, destruction to either is certain. To the owner, therefore, of a miniature garden we should recommend the systematic and merciless eradication of every weed.

Sprinkling salt on paths answers well sometimes as a weed killer; but if your path is

liable to be damp or sticky, avoid salt—it Mending will make it ten times worse. An applica- and keep-
tion of salt is really advisable only where the ing in good paths are very dry, and, even then, it should condition only be used in quite dry weather, for applied in rainy seasons, salt acts like manure upon weeds.

There is a troublesome little moss, which is often apt to invade paths and disfigure them. To get rid of this it is a good plan, during the severe frost, to *scrub* the path violently with a hard broom.

If you want to mend a gravel path be careful to choose wet weather, and, after adding a little fresh gravel to the worn place, beat it firmly down with the back of your spade, and roll it well.

To avoid those puddles which are caused by the settling of rain water, be sure that your path slopes upwards on each side towards the centre.

For a back yard or garden, where appearance may be sacrificed to comfort, there is nothing like a good cinder path for ensuring a dry and pleasant walk.

These are made easily enough, at very

Preparing little cost. They are composed of Macadam the lawn and ashes, with a coating of hot tar. Once made, they will last for years, will always remain dry, and never be weedy. In severe frost the surface should be looked to, and if cracks are found in it, a fresh application of tar, with a little sand or grit, should be made.

Grassplots.—Some owners of even quite small gardens prefer the enjoyment of turf to flowers, and are content to turn all the tiny space at their command into what we should call, perhaps, a grassplot, rather than by the ambitious word “lawn.”

Here are a few hints which may prove useful to this class of “lovers of the turf.”

If you wish to make your grassplot in the cheapest and easiest way, sow grass seeds. March is the best time for this operation.

Before sowing your seeds, however, dig over the ground deeply, breaking the soil thoroughly, and getting your surface perfectly smooth and even. The soil ought not to be too rich, as a rapid growth is not wanted in the grasses of a lawn; but the

surface should be as much alike in quality as possible. Choose a dry day for sowing your seed, and, above all, a calm one. Otherwise the seeds, being very light, are liable to be blown far afield. The seeds should be raked in, and then lightly rolled.

After sowing them, the next point is to protect your seeds from sparrows and other feathered marauders. This is best done by tying threads across the freshly sown ground, with scraps of paper or rag attached to serve as scarecrows.

As soon as the first blades appear, roll constantly to keep down the worm casts. When the grass is rather older, frequent sweeping with a hard birch broom is also good for the same object.

Whenever you detect a bare place, gently loosen the soil with a rake and put in fresh seed.

For a miniature lawn you would probably require at the most one quart of seed, which is usually sold for 25 cents a quart.

A sprinkling of soot, or sand and cinders, in the spring, is good for checking worms and destroying weeds.

Cutting

All turf-forming grasses are improved, both in vigor of root-growth and in fineness of texture, by frequent mowings. It is impossible to say just how often the grass should be mown, as that depends upon the rate at which it grows. Too close cutting should be guarded against, however, especially during the hot summer months, when the roots require some top-growth to protect them from the burning sun. A good top-growth is also necessary to protect the roots from severe winter frosts. Mowing should therefore be discontinued in time to let the grass grow pretty long before winter sets in.

CHAPTER VIII

WINDOW GARDENING

IT has been said that every one who can call a window-sill his own may be a gardener. Of remote antiquity

And that people have found this to be the case in various times and places, one cannot deny, for there is ample proof that the taste for window gardening is both universal and of very remote antiquity.

In his "Gleanings from Old Gardens," Mr. Hazlett reminds us of a story in "Pasquile's Jests" (1604), where a landlady of a country inn tells her customers of a new art that a stranger in London had taught to the citizens "of taking in their gardens every night at their windows, and letting them out again in the morning."

These rustics agreed to go up to town to judge for themselves of the truth of this

Extensive choice of window plants marvellous tale, and after traversing divers parts of the city, the story goes on to tell how at last in a little lane they did see a widow putting out of a garret casement a box, in which she arranged pots of Gilly-flowers, Carnations, and herbs.

Now that our choice of window plants is so far more extensive than was that worthy widow's of nearly three centuries ago, it is marvellous what can be done by flower lovers in the way of window gardening to brighten their homes, both inside and out.

For window gardening means literally the growing of plants in rooms, on window-sills, in window boxes, and plant cases, either inside or outside.

To be successful in this line must involve a certain amount of constant care and trouble, but it need not necessarily involve much expense.

To ensure the welfare of pot plants, we must be careful to select those that are specially suitable to that form of cultivation, and we must also learn what is specially beneficial to them, and what the reverse.

One great essential to their success is to
60

avoid using over large pots. Plants never Great flower so freely as when their roots are some- essentials what cramped. to success

Another is to be careful to have the soil well pressed down round the roots of the plants; a third is to give them regular and systematic treatment. By this we mean avoid violent changes from heat to cold, from light to darkness, water them regularly, not by fits and starts, and don't starve them of air. Plants kept without air grow tall and weakly. The majority of indoor plants are the better for being in a room where the window is kept open about an inch from the top.

An easy and very effectual way of protecting window plants from frost is to put a sheet of brown paper between the pots and the glass.

Another great point is to keep the leaves clean with soap and water. Sunlight soap answers well, being a good insecticide.

The pots should each one be turned a little every day, so as to allow every part of the plant an equal share of light and sun.

The culture of bulbs in pots and glasses

Bulbs is so simple that many directions on this grown in subject will be needless.

fibre Perhaps some of our readers may not know how excellently well bulbs answer when grown in cocoa-nut fibre refuse.

Cocoa-nut fibre can be obtained from any seedsman for about 30 cents a bushel.

Any ordinary jardinière or bowl filled with the fibre will answer the purpose. Indeed, bulbs grown in this way require no drainage, and as the cocoa-nut fibre makes no stain, a china bowl may be used fearlessly.

Ordinary flowering bulbs, notably Hyacinths, Narcissi, and Tulips, do remarkably well under this treatment.

Put the bulbs into the fibre in the autumn and keep them in the dark, being careful to push the bulbs down firmly as soon as the roots show signs of growth. When they have grown about an inch, they may be exposed to the light, but very little water should be given until the flower stems appear. Then give as much as the fibre will absorb.

Very pretty effects may be obtained by planting Crocuses in shallow saucers filled with cocoa-nut fibre.

To secure a display of Roman Hyacinths Varieties for Christmas, put the bulbs, in September, specially in six-inch pots—not more than six bulbs in each—and cover them over either with fibre mended or ashes. Keep them in the dark for a month.

After that, they can be brought into the room, but it is well to shade them for a few days at first, by keeping a reversed pot over them till they have become accustomed to the light.

Besides the ordinary bulbs, such as Crocus, Snowdrop, etc., those we should specially recommend to our readers are the following:

Early double white Tulip, and scarlet ditto; these are very hardy and most ornamental.

Scilla Sibirica; beautiful blue flower.

Glory of the Snow; also blue and white.

Winter Aconite; bright golden.

When the bulbs have done flowering, if there is no spare space in your gardens where they can be temporarily placed, keep them in a box filled with mould till their growth is quite finished. Water them as long as their leaves last, but as soon as these

Window plants. die down, take the bulbs up, dry them, and stow them away in some cool dry place till the autumn.
Cactus

Amongst the flowering window plants, those that last the longest and require the least attention, are Geraniums, Fuchsias, Balsams, Begonias, Primulas, Myrtles, Cactus, and Musk.

All of these, with rare exceptions, will do well if the commonest care is bestowed upon them.

The increasing of Geraniums and Fuchsias by cuttings is a very interesting branch of window gardening.

We refer our readers on this subject to Chapter X.

As regards the cultivation of the Cactus, few indoor plants are so ornamental or so easily grown. Being dormant during the winter, all that they need is protection during the frost. From November to March they should be kept very dry. From that time onwards, however, they require just the reverse treatment. Water them plentifully with tepid water, and place them as near the glass as possible, so that they may

have abundance of light. They will then develop buds quickly and will soon show a hanging magnificent display of their lovely scarlet or basket creamy tassel-like blooms.

The surface of the soil in the pots should be stirred occasionally with a stick, and a little fresh soil added. A periodical watering with thin soot water is also good.

Of the simplest possible culture also is the dear old-fashioned Musk.

All it needs is ordinary soil and abundance of light and water.

Cuttings are easily rooted in spring, and will do splendidly if planted in the bowls of cocoa-nut fibre, when the winter bulbs are taken out of it.

The Scarlet Musk and tall Orange ditto are very handsome varieties, and do well in pots, but they have no fragrance.

Walnuts may be easily grown in pots placed in a sunny window, and their rich colored foliage make them very handsome ornamental table plants.

A hanging basket makes a very pretty ornament suspended in a window.

It may be filled with bulbs for the winter,

The
India-
rubber
plant

and afterwards planted with ivy-leaved Pelargoniums, Creeping Jenny, and Lobelias. The Fuchsia Procumbens, bearing large magenta crimson *berries* through the winter, is good for baskets, if the room be kept fairly warm.

Also the Alba Campanula, pure white, trailing, is good.

Do not attempt ferns; they rarely answer in a basket.

In order to keep the soil moist, dip the basket bodily into tepid water about every third day.

Of course, under the head of window plants, we should mention the well-known Indiarubber plant, the Aspidistra—the parlor palm—a grand foliage plant for rooms, as it needs very little attention, and is injured, apparently, neither by gas nor drafts.

They may be had for about 25 cents each.

The New Zealand Aloe, with its zebra-striped sword-shaped leaves, the Dracenias, all ornamental foliage plants, are excellent for rooms.

The Indiarubber plant is more often wrecked by carelessness in watering than

from any other cause. In winter, it should Palms be kept fairly dry, and never at any time allowed to stand in water.

The Aralia Sieboldi Var—called sometimes, but wrongly, the Castor Oil plant—is well suited for indoors' culture.

The foliage of the true Castor Oil plant is far more handsome than the Aralia, and is sometimes grown indoors with success; but it should never be exposed to gas, or it will languish at once.

For those who may wish to aspire to palms, the Kentia Belmoreana, Kentia Fosteriana, and Latania Borbonica we would recommend as being most useful half-hardy palms, and all very effective ones.

In conclusion, we repeat our advice to keep indoor plants scrupulously clean. Besides keeping the foliage well washed with warm—not hot—soap and water, pick off every dead leaf, and suffer not an insect to live!

“Don’t be persuaded,” says a writer in the *Amateur Gardening*, “to water your plants with cold tea, coffee, beer-dregs, or any other nastiness. By so doing you make

Care of your soil sour, and as a natural consequence the foliage your plants become unhealthy."

To make the foliage look glossy, it is sometimes good to sponge the leaves over with milk and water; but we do not personally commend the use of lamp rags—impregnated with paraffine—for the same purpose. No doubt it may make the foliage glossy, but we leave it to our readers to decide as to the fragrance which must result from this proceeding!

When pot plants look pale and sickly, a rusty nail put in the water of the saucer is good.

CHAPTER IX

WINDOW BOXES

WE come now to outside window-sill gardening. The furnishing

The furnishing and subsequent maintenance of window boxes requires care and consideration, but will repay all trouble amply.

Here again the choice of suitable plants for different aspects is of the first importance.

In a window facing either due south or south-westerly, the heat in summer—owing to the masonry surrounding the window—is often so great as to prove fatal to some plants, whilst for the sill of a window facing north, sunshine is so scarce all the year round, that flowers are far better left alone, and only foliage plants cultivated.

But first, as regards the actual boxes.

Simpler
ones pre-
ferred

Of these there are a great variety, some
being very decorative.

For our own taste, we prefer the simpler
ones. Those faced with virgin cork are
nice, or painted with some sober color, which
will preserve it against weather, and will not
offend the eye.

We once remember seeing the houses of
a tiny Dutch village decorated with window
boxes of a flaming red color, and a more
hideous effect it would have been hard to
produce.

The least ambitious form of window box
we have ever seen, and which, we are bound
to say, answered its purpose perfectly, was
constructed out of an old wooden box ob-
tained from the grocer's, and faced with
pieces of rough bark. These—"tell it not
in Gath"—the owner had annexed to him-
self, to use no stronger term, during certain
predatory excursions amongst the trees of
a neighboring wood.

The whole cost of this box was under 10
cents.

But this was altogether an unorthodox
way of proceeding. Indeed, we only men-

tion it for the encouragement of those of Drainage our readers who may not, perhaps, be in the way of getting anything better in the shape of a sill garden.

A good plan for securing drainage for the plants, and, at the same time, securing a due amount of moisture, is to line the wooden box with zinc, and then to have an inner zinc tray, perforated, to fit in at the top. This allows the water to filter through, but keeps a damp subsoil for the plant.

Window boxes should always be movable.

Another plan, recommended in *Amateur Gardening*, is to fix rough cork on to the boxes—this keeps the roots cool—and to cover the surface soil with moss. This should be kept continually damp by watering with a rosed watering-pot.

For winter, that being the time when, of all others, we appreciate greenery, window boxes are specially valuable.

Even in smoky towns, hardy wallflowers will make a brave show along with various Conifers, Euonymus, and Variegated Ivies. Beside these, such shrubs as the Aucuba Japonica, with its large carmine fruit, and

Good soil, broad, handsome foliage; the Japanese Necessary Cypress, and the Skimmias and Pernettyas, watering both bearing bright berries, and costing each about 25 cents, are all suitable for winter window boxes.

But these shrubs should not be turned out of their pots for the winter. It is better, in putting them into the box, to sink them either in sand or soil up to the rim, and cover over the surface with moss.

A very pretty effect may be produced by putting in small, hardy bulbs, such as Snow-drops, Crocus, etc., in the intervals between the pots, which often come into flower about Christmas time. Roots of primroses, planted between the pots to flower in early spring, also look charming, their pale, silky petals showing well against their mossy setting.

Good soil is necessary, but judgment must be used as to the amount of watering necessary. If window boxes are kept too moist, they are sure to suffer from the frost, so that, on the whole, it is safer to keep them too dry in winter than the reverse.

In very severe weather it is well to lift the boxes indoors for the night, or, at any rate,

to give them protection by covering them Winter with brown paper or matting of some sort. shrubs in

Do not neglect your winter shrubs in the the summer. Put them out of doors in a fairly mer sunny position, so that they may harden their wood, and whilst the buds are forming give them plenty of manure.

For spring planting, nothing is more effective than bulbs.

They should be planted very thickly in October and November; and here the arrangement affords grand scope for the display of taste. Exquisite effects can be produced by the mingling of Snowdrops and scarlet Tulips, and golden-flowered Daffodils, toned down into a harmony of color by the introduction of the different shades of Hyacinth, which contribute nearly every imaginable hue.

When the glory of the bulbs decline—you will remember the directions already given for treatment of bulbs after flowering—it is time to think of summer flowers.

Here there is such a wide field for choice that we shall mention but a few of the very many plants that our readers might safely cultivate.

Suitable for summer boxes For town windows in the summer, nothing, perhaps, answers better than the ivy-leaved Pelargonium. Not only do their succulent leaves defy heat, but the habit of their foliage being to hang well over the box, they keep the latter cool, and thus serve as a protection to the roots. The semi-double blossom is the most effective of the many varieties.

For a house with gray walls, Madame Thibaut's clear rose blooms very well; the white variety of Joan D'Arc suits red bricks; whilst Gordon's Glory, a deep red, looks magnificent against stone walls.

The middle of May is a good time for putting them into the boxes. It is well to syringe them frequently before they actually come into flower.

Lobelias, blue and white; Musk, Mignonette, Calceolaria, ten-week Stocks, Petunias, dwarf Asters, and Mimulus *Tigrioides*—monkey flower—are all most suitable for summer boxes. So also are the very brilliant blossoms of the crimson Jacobaea, the American groundsel.

The French Marguerite—the pure white

and the rich yellow—are most effective, Shady especially when mixed with the Henry Jacobsy, which latter is the only zonal Pelargonium which we would advise beginners to grow. (Geraniums love the sun, remember, so that a window which only gets the morning sun is not suitable for Geraniums.)

The *Salvia Patens*, with its exquisite blue blossoms, and the *Salvia Coconiea*, with its brilliant scarlet bloom, are both good for boxes. The latter is a half-hardy annual, the former a half-hardy perennial.

For a window where there is not much sun we recommend Fuchsias.

Like Musk, Fuchsias always last longest in bloom in the shade.

Fuchsias have been rightly called “everybody’s flower,” for they are so easily raised, either by cuttings or by seed. Zonal Pelargoniums may also be raised by seed.

To raise Fuchsias by seed, fill a shallow box or well-drained pot of good, light mould, moisten well with tepid water; the temperature of an ordinary living room will do, say from 55 to 65 degrees.

March is a good time for putting in the

Fuchsias and Begonias seed, so that by the summer the plants may flower freely. A good plan for producing those long, trailing sprays of Fuchsia which produce such a pretty effect, drooping down from boxes, is to procure an old plant and cut it down almost to the soil in February, and then, directly the first new shoots show, re-pot it in good soil.

The best kinds for window boxes are, we have found, "Aurora Superba," "Elm City," "Charming," "Avalanche," "Abundance," "Frau Emma Topfey," and "Ernest Renan."

Any soil is good for Fuchsias, but they should be taken indoors and stored before the frost comes on.

Fibrous-rooted Begonias, Nasturtiums, Convolvulus, and *Canariensis* do all well in boxes.

The Begonia, however, with its pink blossoms and very handsome foliage, requires shading in great heat, otherwise its flower becomes quite pale. Nasturtiums answer well, if a few seeds are put in at the end of each box, to climb up the sides of a window and form a miniature archway.

Here are some simple directions for producing a very effective window drapery: Window drapery.

Sow the seeds at either end of the box, Chrysanthemums then train the creeper up a stout string, which should be fastened to the wall with rather long nails, so as to keep it a fair distance off the wall. A nail should also be put into the centre of the stonework over the window, two nails on either side, about a foot from the top of the window, and two more nails on either side of the stonework, just above the box.

When the summer flowers are going over, Asters, Chrysanthemums, and the Helichrysums—everlasting flowers, golden, white, and crimson—come in very well.

The double white and double yellow Chrysanthemums are both hardy annuals, and, with Asters—these require treatment as half-hardy annuals—do excellently for autumn boxes. The Chrysanthemum Burridgi is very beautiful, having white petals with bright crimson ring. It is quite hardy. The Chry. Carinatum is also a capital dwarf annual for box culture.

For quite late autumn boxes, when we

Fertilizers. are on the threshold of winter, nothing is prettier for town windows than the Laurestinus, with its pretty bunches of pink and white blossoms, or the Barbaris Darwini, with its scarlet berries. We add a few general remarks in conclusion.

Remember that however much rain may fall, very little usually reaches the window boxes; consequently, they must be always well watered.

Good soil is also necessary for the maintenance of so many plants in such a limited space. The plants last longer in flower if some stimulant, such as soot water, is applied to their roots about twice a week. We give directions for this most valuable and easiest home-made fertilizer elsewhere. Ready prepared fertilizer can be obtained, however, at little cost, of any seedsman.

Beware of allowing any insect pests to establish themselves in your boxes. In spite of all the many and much-vaunted insecticides, we have found that pure water is as effectual an insect exterminator, when properly applied, *i.e.*, with a syringe, as anything else.

Where this fails, however, soft soap, dissolved in water—about two ounces to half-a-gallon of tepid water—and applied with a syringe for several days in succession, will answer well. Jadoo

Smoking over plants will destroy the green-fly, and the old-fashioned dusting with snuff is also a good remedy.

Where rich soil is not easy to obtain, jadoo, tightly stuffed into window boxes, is an admirable substitute.

It can be purchased at any seedsman's at the rate of about 25 cents per box.

CHAPTER X

ON CUTTINGS, ETC.

Usual
method

GERANIUMS, Fuchsias, Carnations, Pansies, and many other plants are usually propagated by cuttings.

As the name implies, a cutting is a shoot or twig cut off from the parent plant to be grown as a separate individual.

Though taking cuttings is reckoned by gardeners a comparatively easy operation, yet to do so successfully demands a certain amount of skill and painstaking.

We will suppose that you are going to take cuttings from an old plant of Geranium, which after having bloomed freely has become straggling and what gardeners call *leggy*.

In this condition the plant will furnish a number of shoots for cuttings. (The old

plant will be all the better for being closely Propagated-pruned.) With a sharp knife sever the longest shoots from the plant and then proceed to divide each of them into cuttings of about three to five inches in length. Be careful to trim each one to a joint.

After making your cuttings you will do well to let them rest for half a day before putting them into soil, so as to allow them to get rid of all superfluous moisture.

If the cuttings are made in, say, August, you may fearlessly dibble them into some sunny border, watering them well with a fine rosed can. After they have rooted, take them up and put them into pots before there is any chance of frosts.

If, however, the cuttings should be made at the close of the winter, you will be obliged to have recourse to a propagating box.

As we take it for granted that our readers have no greenhouse, and only a window at their disposal, we are suggesting the simplest method of plant propagation to be employed under such conditions.

Provide yourself with a common deal box, not less than twelve inches deep and about

Management of the pots

eight or nine inches wide. Procure also some pieces of glass to lay over the top. You need not be particular about these fitting very closely, as a small aperture at the corners is very desirable, in order to allow the steam to escape from the box.

Fill in the bottom of your box to the depth of about three inches with a layer of well-sifted coal ashes. These ashes must be kept damp, so as to promote an artificially moist atmosphere.

A little experience will soon teach you how to maintain this by watering enough and yet not too much. And remember to use tepid water.

The next point is the management of the pots.

Select pots about five inches in diameter, and fill with sandy loam. These should hold four or five cuttings. Insert them in the soil with the help of a blunt-pointed stick, and arrange round the edge of the pot. For the first few days very little air should be allowed to reach the cuttings, but the glass covering them should be carefully wiped every morning, otherwise the steam

formed during the night will run off and Light and drop on the young plants, thereby produc- air ing mildew.

Directly you observe that the cuttings are beginning to grow, you may feel sure that they are making roots, and you must then give them a gradual increase of light and air.

If your window is very sunny you must give them shading during the first few weeks. A sheet of newspaper spread above the box will be quite sufficient protection.

As your cuttings grow stronger the glass may be dispensed with altogether. You may begin to pot them singly about April.

As regards the culture of Geraniums for pot plants, you must bear in mind that they do better in comparatively small pots, and do not require rich manure.

Fuchsia cuttings can be taken from the parent plant when the young shoots are about three or four inches long.

Put about nine such cuttings into a four-inch pot and treat as advised for Geranium cuttings. As soon as they have rooted, pot them off into small pots, with good loam, mixed with a little leaf-mould and silver sand.

Cuttings from Pinks and Pansies During their growth keep them near the glass, in order to make them what is termed short-jointed, a desirable feature in Fuchsias.

Keep the soil fairly moist, and recollect that young Fuchsias require plenty of air and light to promote their growth.

They are all the better for having their main stem trained to a stake.

In taking cuttings from Pinks and Pansies —July is a good month for this—be careful, in the case of Pinks, to select the bottom shoots from the old plants, cutting them at the third or fourth joints.

For Pansy cuttings, take the young shoots also that spring from the base of the old plants.

Remove all their lowest leaves, choose a shady spot in your garden, and prepare your soil by sprinkling a thin layer of silver sand on the surface.

Put the cuttings in, fairly closely together, water freely, and cover with a hand-light.

They will need little more attention until they are rooted, when they can be transplanted.

Pansies, raised from cuttings, make the Layering best plants for pot culture.

Carnations can be raised by cuttings, and also by the process known as layering.

Cuttings should be made early in July, but as they require considerable attention when rooting, we are inclined to recommend our readers to try layering in preference.

This operation, which should be undertaken during August, or thereabouts, is performed as follows:

With a sharp knife remove the lowest leaves, then cut the stem half through from the lower joint, upwards for about an inch. Then bend the stem downwards to the soil.

(Before beginning the layering, you must sprinkle a little light soil round and underneath the plants, as this will promote the quick rooting of the layers.)

After bending your stem down, insert the kind of little tongue, which was formed by your upward incision in the stem, into the soil, and pin it down with a crooked peg.

(Pegs made from the common bracken are excellent for this purpose.)

Care must be taken to avoid two dangers

Dangers to avoid which may beset the beginner in performing this operation.

One is to cut the stem too deeply; the second is to break the joints in bending them downwards.

The layers should be watered through a rosed can, so as to settle the soil around them, and in dry weather you should water them every evening until they have rooted.

If your layering is successful the shoots should be sufficiently rooted at the end of about five or six weeks to make it safe to detach them from the parent plants. This should be done close to the joint from which the layering started.

Be careful to take them up with plenty of soil hanging to their roots. If your border is fairly sheltered you may transplant them to some open border at once, giving them protection during frosts in winter; but if your climate is a cold one, you will, perhaps, do better to keep them indoors till the spring.

Carnation cuttings should not be more than two inches long, and should be dibbled into the ground about two inches apart from each other every way.

They will require to be kept under hand-lights, and need more care and attention in the matter of watering and shading from light than we think that many of our readers may be able to give, so we repeat our advice as to the wisdom of selecting the layering as the simplest process for beginners.

In the case of most perennials the easiest and best method of propagation is by the division of the roots.

Christmas Roses, Autumn Daisies, Perennial Sunflowers, Doronicums, and Perennial Phlox specially lend themselves to root division.

It should be done as soon after they have done flowering as the weather will permit.

A sharp knife is as good a tool as any for the operation, but a new tool that we have lately come across, known as the "Champion Weed-killer," is very handy for this purpose.

Except for the sake of dividing their roots, Christmas Roses should never be disturbed when they have once been planted.

CHAPTER XI

A FEW GENERAL HINTS

Pot-bound IN putting in plants, be always careful to plants tread down the soil firmly round them.

When you are moving a plant from a pot to a border, see if the plant has become pot-bound. By this is meant the case of a plant whose roots, owing to lack of room, have been unable to spread themselves out, and have therefore become curled and hopelessly entangled.

When this is the case, proceed as follows:

Start with the main root. Uncurl and straighten this out as much as possible, grudging neither time nor patience in the operation. Then the fibrous side roots must be dealt with. Sometimes one's own fingers are the only effectual tools; but if not a very desperate case, a blunt-pointed stick will be of much service in disentangling

the network of fibres, and *combing* them out, Treatment
so to speak. for new

If you neglect these precautions and transfer a pot-bound plant in that condition to the soil, it will certainly never thrive.

On receiving plants by mail, or indeed any that have been out of the ground for any time, lay them in tepid water for an hour at least, before attempting to plant them, for you must remember that they require to replenish their evaporated moisture.

Above all things, in the case of planting newly removed plants, avoid the fatal mistake of dosing them with fertilizers or manures of any sort. Being more or less in an exhausted condition, and having no roothold in the ground, they only require water, and if given such rich food before they have recovered their powers of assimilation, will probably die outright.

As a cardinal rule, never give sickly plants manure. It will ensure their destruction as certainly as if you fed a much enfeebled invalid on alderman's diet.

Never attempt to plant anything when the soil is either very wet or frozen.

Frost

After a long frost, look well to your outdoor plants. You will probably find the soil in such a loose condition that it will require careful treading round the roots of your plants. If you neglect to do this you run a good chance of losing them.

“ For the frost,” says a quaint old gardening chronicle of the last century, “ by separating the particles of soil, doth open doorways and passages for the entrance of cold air to the tender roots.”

If you happen to have a plant frozen in a pot, beware of putting it near heat. Give it a cool dark position, and sprinkle it with hot water.

Wait till it is quite thawed before you bring it into the warmth.

Keep weeds under at all costs.

Our old calendar of 1758 declares that June is the best month for extirpating weeds, for “ each weed that ripens then will breed one thousand.”

In small gardens we recommend weeding by hand, or with a small weeding fork.

If you wish to save seeds from any of your plants, say Wallflower, as soon as you see

the pods are inclined to burst, cut them off Saving the and lay them on a sheet of newspaper to seeds. ripen on some sunny window-sill. Clipping

If you have no window available for this purpose, put the pods into a bag, and hang them up in some sunny place.

In planting Canary-Creepers, Petunias, and Verbenas, be careful to peg them *as you plant them.*

Otherwise, the wind will make havoc of your young plants.

In staking and tying up the stem of plants, remember to allow sufficient room for their stem to swell, as they generally increase rapidly.

To protect Snowdrops from being eaten by slugs, dust the plants well with soot before the flowers open.

You may clip Box, Yew, Privet, and Ivy with hand-shears, but use a knife to trim your Laurels.

Ivy, growing against walls, should be clipped back quite close to the stems, during April, to ensure a heavy foliage later.

In planting Ivy, dig a hole eighteen inches deep and three feet wide for each plant;

Home-made fertilizer. mix old mortar and well-decayed manure freely with the soil.

Cinders In staking Sweet Peas, place your sticks perpendicularly; don't follow the usual plan of slanting them inwards. The stakes placed perpendicularly give the pea shoots a better chance of developing, and also afford greater scope for air and light to the plants.

The cheapest and most effectual home-made fertilizer is soot water.

Put a quart of soot into a coarse canvas bag, and steep it for three days in a pail of water. Put a heavy stone into the bag to keep it at the bottom of the pail. At the end of three days, throw away the bag, and use the soot water as you would ordinary water.

Before applying it to your soil, however, it is well to make sure that it is moderately damp, by giving the soil a thorough soaking with fresh water.

Make use of your cinders. If properly sifted they are most valuable even for a small garden.

For protecting delicate roots during the winter, dry, clean ashes are invaluable.

Moreover, there are very few soils that Flower are not the better for having ashes dug into pots. them. And even a tiny ash-pit in a small Over-back garden is a veritable treasure for receiv- watering ing the winter flowering plants during the summer.

And here are a few hints about pots and pot plants:

Always use small pots for small plants, for if a plant cannot imbibe all the water poured on it, the surrounding soil becomes stagnant and sour, and the plant does not thrive well.

Remember that all pots required for use must be carefully washed and dried before using.

New pots should be soaked some time before filling, otherwise they will absorb all the moisture of the soil.

Overwatering plants in rooms is a common and very great mistake.

To ascertain whether a plant requires water, tap the outside of the pot, and only if it emits a clear, ringing sound, give water.

Do not water in dribbles; give enough to soak through the pots.

Treat- Never leave water standing under pots in
ment for saucers.

dropping Rain water is, of course, the best for
petals plants, but where this cannot be had, water
 that has been exposed for some time to the
 air is the next best substitute.

In watering Cyclamen in pots, pour the water at the sides of the pot, never over the corm, and the water should never be left in the saucer.

Single-flowered Geraniums have the great drawback as a window plant of dropping their petals so quickly.

To obviate this, it is a good plan to drop a little liquid gum at the end of a pointed stick in the centre of each single flower directly it is opened.

We have found this plan answers admirably, also, in the case of cut flowers. These will last twice as long in water under this treatment.

CHAPTER XII

OF GARDENERS' FRIENDS, FOES, ETC., AND OF TOOLS

REMEMBER that large garden spiders, as Slugs and well as a certain yellowish slug that always beetles carries a small shell, are both to be reckoned as the friends of gardeners, and to be respected accordingly. They prey upon some of the most destructive insect pests.

The spotted Lady-bird is also a valuable ally, for she makes war upon the aphides or green-fly, so hurtful to roses.

Again, there is a certain longish, very sooty kind of black beetle, popularly known as the "devil's coach-horse"—the *Ocypus Olems*—who renders good service by feeding chiefly on earwigs.

These latter are very troublesome pests. They can, however, be caught by trapping

The best them in inverted pots filled with straw or insecticide paper.

Wood lice may be caught by placing bits of boiled potatoes about your flower borders.

The larvæ of the Crane-fly, commonly known as Daddy-Long-Legs, are very troublesome foes. They are about an inch-and-a-half when fully grown, and wriggle rather than crawl along the soil.

The best insecticide for these pests is lime.

A mixture of strong ammonia, containing not more than one tablespoonful to a quart of water is a very good remedy for slugs on flower borders. Not only does it prove fatal to all slugs with which it comes in contact, but it also serves as a manure.

Amateurs, however, had better begin with a very weak solution, as we have found from experience that ammonia as supplied by the ordinary druggist varies very much in strength.

Above all other foes make war on the wire-worm. It is most mischievous to seedlings. It is easy to recognize, being of a yellowish-white color, and having three pairs of legs near its head.

It should be trapped by scraps of carrot Other or potato put on the end of a stick, which trouble- should be inserted just under the soil where some pests its presence is suspected.

Beware also of the red spider—that is, the *real red one*.

This insect is exceedingly small, to the naked eye only measuring one-sixtieth of an inch.

They attack leaves of almost any plant. Their presence may be suspected when the foliage of a plant becomes pale and seared. As a rule they prefer the under-side of leaves, and should be hunted for in that position.

Water, freely applied, will be very effectual in putting them to flight, but where Roses, Carnations, and other flowering plants are attacked we have found great benefit by dusting the under-side of the leaves with flowers of sulphur.

To get rid of another troublesome pest, which besets Fuchsias especially, namely, thrips, we have found sponging the leaves and stems with fir tree oil most successful. It destroys all plant insects without injuring the plant.

Getting
rid of
earth-
worms

In the case of pot plants the earthworm is a terrible foe. Their casts on the surface of the mould always betray their whereabouts.

As soon as you detect them, you must get rid of them, for they are most destructive.

Amateur Gardening gives the following directions for achieving this:

“ Make lime water by pouring four gallons of water on two pounds of fresh lime, then stir well, and let the liquid stand forty-eight hours.

“ When ready for use, stop up the hole at the bottom of the pot with clay or putty, and then soak the soil thoroughly with the clear lime water only.

“ The worms will come to the surface, and should all be removed.

“ After six or eight hours the putty may be removed, but if the worms have been working in the soil for any time the plant should be turned out of the pot to allow the drainage to be cleared and put right.”

To come to foes on a larger scale than insect pests, but often quite as much or more

destructive, namely, cats, it is said that Tools orange peel thrown on the beds and borders will effectually drive them away. Possibly, but it is at best a very unsightly remedy, and we have found from personal experience that a sprinkling of chloride of lime answers perfectly, and acts, moreover, as a scare to rats and mice.

And now one last word about tools.

For window gardening, a trowel, a miniature hoe, a small three-pronged fork, and a pair of garden scissors are all the tools required.

A fine-rosed watering pot is, of course, indispensable.

For outdoor work, besides the spade, rake and hoe, and trowel, we recommend the Dutch hoe as very useful for working within borders and lightening soil, as well as the "champion weed-killer" already mentioned. Its divided points, with their sharply bevelled edges, are excellent for stirring the surface soil in planted beds and borders as well as, as its name denotes, for spudding up weeds. An edging iron is also useful.

Besides watering cans, a hand-light is al-

“Neat, most a necessity, if you have any intention clean, and of pursuing plant-propagation and rearing orderly” rather delicate seedlings.

One about two-and-a-half feet square, and costing about a dollar, would be quite large enough for your purpose.

In conclusion, let us remind our readers that to be a successful gardener, even on a miniature scale, you must be neat, clean, and orderly. Never work with dirty tools, for you will never do good or satisfactory work with them. To avoid this, never put them away without cleaning them; and when opportunity occurs, say a wet day, when no work can be done out of doors, it will be well spent time if you devote this enforced leisure to burnishing up your tools. Rust should never be tolerated to settle on them. Keep your borders tidy, and never suffer dead leaves to remain amongst your pot plants.

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